AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0067] of the specification as published (2005/0058165) with the following amended paragraph:

[0067] Some numerical results comparing <110> YAG and <100> YAG are summarized in FIG. 1 and FIGs. 2A-2D. FIG. 1 shows a graph representing a value of the absorbed pump power, for which the <110> YAG and <100> YAG crystal orientations yield ~~for~~ equal depolarization loss, versus the ratio of beam diameter to diameter of a pumped region ~~for <110> YAG and <100> YAG~~. For the sake of example, it is assumed that the beam and pumping cross-sections are circular and that the pumped region covers the entire cross-section of the rod, although this need not be the case. From FIG. 1 it can be seen that <110> has less depolarization than <100> when the beam diameter (defined, e.g., at $1/e^2$ power) is less than about 45% of the diameter of the pumped region (so beam area less than about 20% cross-sectional area of the pumped region). Even then, the absorbed pump power must be greater than about 1000 Watts. So the <110> orientation has the advantage only for small, very high power beams. Thus, the inventor's calculations show that, for all other beams, <100> is the preferred orientation.

Please replace paragraph [0098] of the specification as published (2005/0058165) with the following amended paragraph:

[0098] FIG. 5A depicts an externally frequency-tripled laser 500A having as a gain medium a <100>-oriented crystal 502A and

pulsing mechanism 514 disposed within a cavity 501A defined by reflecting surfaces 504A, 506A~~B~~. The gain medium may include dopant ions 507 as described above. The cavity 501, crystal 502, reflecting surfaces 504A, 506A~~B~~, ions 507, and pulsing mechanism 514 may be as described above with respect to the corresponding components in laser 300 of FIG. 3A. The laser 500A may further include a source 510A of pump radiation 512, which may be a diode laser or flashlamp as described above.

Please replace paragraph [0099] of the specification as published (2005/0058165) with the following amended paragraph:

[0099] One of the reflecting surfaces, e.g. surface 506A~~B~~, is partially (e.g., about 10% to about 99%) reflecting with respect to and serves as an output coupler. The laser 500A further includes first and second non-linear elements 516 518 disposed outside the cavity. The first and second non-linear elements are phase-matched as described above to produce third-harmonic radiation TH from the stimulated radiation from the crystal 502A that emerges from the output coupler 506A. Because of the external configuration of the non-linear crystals 516, 518, they need not have Brewster-cut faces. The ultra-low loss of a Brewster face is not as important, though still of some value, with respect to wavelength separation. A higher intensity in e.g., LBO is required for higher conversion efficiency (e.g., greater than about 20%). Thus, focusing into LBO or short pulses with high powers may be needed.